

## **IN THE CLAIMS**

Please amend claims as follows:

1 - 11. (Cancelled)

12. (Currently Amended) An image processing apparatus, comprising:

a characteristics extracting unit to extract characteristics of wavelet coefficients of one or a plurality of rectangular regions dividing an image, wherein the characteristics of wavelet coefficients extracted by the characteristics extracting unit are based on the frequency components included in each of the rectangular regions;

an embedding specification determination unit to determine, in accordance with the extracted characteristics of the wavelet coefficients for each rectangular region, an embedding specification of digital watermark data with respect to the wavelet coefficients,

wherein when a rectangular region includes a lot of high frequency components, the embedding specification determination unit determines that an amount of embedding information of the digital watermark data is heavy, ~~and~~

when the rectangular region does not include a lot of high frequency components, the embedding specification determination unit determines that an amount of embedding information of the digital watermark is light,

and the embedding information to include a greater amount of the digital watermark data in a first high frequency component in horizontal and vertical directions than a low frequency component in a horizontal direction and a second high frequency component in a vertical direction; and

a digital watermark embedding unit to embed the digital watermark data into the wavelet coefficients for each rectangular region in accordance with the embedding specification of each rectangular region.

13. (Original) The image processing apparatus as claimed in claim 12, wherein the amount of embedding information of the digital watermark data is varied.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) An image processing method comprising:  
extracting characteristics of wavelet coefficients of one or a plurality of rectangular regions dividing an image, wherein the extracted characteristics of wavelet coefficients are based on the frequency components included in each of the rectangular regions;

determining, in accordance with the extracted characteristics of the wavelet coefficients for each rectangular region, an embedding specification of digital watermark data with respect to the wavelet coefficients, wherein determining an embedding specification of digital watermark data with respect to the wavelet coefficients comprises determining that an amount of embedding information of the digital watermark data is heavy when a rectangular region includes a lot of

high frequency components, ~~and~~ determining that an amount of embedding information of the digital watermark is light when the rectangular region does not include a lot of high frequency components, and the embedding information to include a greater amount of the digital watermark data in a first high frequency component in horizontal and vertical directions than a low frequency component in a horizontal direction and a second high frequency component in a vertical direction; and

embedding the digital watermark data into the wavelet coefficients for each rectangular region in accordance with the embedding specification of each rectangular region.

19. (Original) The image processing method as claimed in claim 18, wherein the amount of embedding information of the digital watermark data is varied.

20. (Cancelled)